

## Stephen Magill

Physicist  
HEP Division  
Argonne National Laboratory

### *Education and Training:*

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|-----------|----------------|--|
| 1983-1990 | PhD in Physics | University of Illinois at Chicago, Chicago, IL |
| 1972-1976 | BS in Physics  | University of Maryland, College Park, MD       |

### *Research and Professional Experience:*

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|--------------|--|
| 1998-Present | Physicist, HEP Division, Argonne National Laboratory, Lemont, Illinois |
| 1993-1998    | Assistant Physicist, ANLHEP  |
| 1990-1993    | PostDoctoral Appointee, ANLHEP   |

### *Selected Publications:*

1. M.R. Adams, et. Al., “Shadowing in the muon xenon inelastic scattering cross-section at 490-GeV”, Phys.Lett.B287 (1992) 375-380.
2. M. Derrick, et. al., “Measurement of alpha-s from jet rates in deep inelastic scattering at HERA”, Phys.Lett. B363 (1995) 201-216.
3. S. Chekanov, et. al., “Forward-jet production in deep inelastic scattering at HERA”, Eur.Phys.J. C52 (2007) 515-530.
4. Stephen R. Magill, “Innovations in ILC detector design using a particle flow algorithm approach”, New J.Phys. 9 (2007) 409.
5. S. Magill, et. al., “Enhanced UV light detection using wavelength-shifting properties of Silicon nanoparticles”, JINST 10 (2015) no. 05, P05008.
6. M. A. Acero, et. al., “New constraints on oscillation parameters from electron neutrino appearance and muon neutrino disappearance in the NOvA experiment”, Phys.Rev. D98 (2018) 032012.
7. Akrim Artikov, et al., “Photoelectron yields of scintillation counters with embedded wavelength-shifting fibers read out with silicon photomultipliers”, NIM A, Vol. 890, (11 May 2018).
8. Sunil Sahi, et al., “Wavelength-shifting properties of luminescence nanoparticles for high energy particle detection and specific physics process observation”, Scientific Reports 8, no. 10515 (2018).

### *Synergistic Activities:*

1. International Advisory Committee for the Calorimetry in High Energy Physics International Conferences (2000-2018).
2. NOvA Experiment Run Coordinator during Far Detector installation and commissioning phase (2013-2014).
3. Mu2e Test Beam Run Coordinator (2016).
4. PI for innovative, new direction R&D project using nanoparticles to detect UV light from noble liquids and gases, scintillating crystals, Cherenkov emitters, and ambient atmospheric light (2014-present).
5. Coordinator of CPA production for ProtoDUNE SP, CERN Neutrino Platform (2016-2018).
6. CPA Working Group Convener, DUNE HVS Consortium (2017-present).